

Work Order ID 154436

Tuesday, December 13, 2016 8:03:22 AM

154436

Page 1

Item ID: D3552-11

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Door Prop

Start Date: 12/13/2016 Start Qty: 8.00

8

Cust Item ID:

Required Date: 12/28/2016 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: DEC 13 2016

Date:

DAS
13
9-89

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3552	L

100

0.00

100

Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O: 34665
Purchase Part Number: B8-240-575-150N
Supplier: LS Technologies
Certificate of conformity is required

8

DEC 16 2016

DAS
13
9-89

110

0.00

110

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

0.03

Packaging

Ensure certificate of conformity is attached

8x 8/16-12-22

120

0.00

120

QC

QC6- Inspect dimensions to drawing

Memo

0.00

Quality Control

Test for correct pressure

34165

⑤

16-12-22

DAS
9
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval					

Root Cause			FAULT CATEGORY					
Environment	☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design	☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data	☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling	☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre	☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material	☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport	☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge	☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA	☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation	☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date	☐	☐ Manufacturing Process	OTHER : _____					
Misidentified	☐	☐ Past Due						

Work Order ID 154436

Tuesday, December 13, 2016 8:03:22 AM

154436

Page 2

Item ID: D3552-11

Accept

N900040100Setup Start ***NS1***

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Stop ***NS2***

Item Name: Door Prop

Start Date: 12/13/2016 Start Qty: 8.00

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>RT363</u>	0.00							
130						<u>SX</u>			
Packaging	Memo	0.01						JAN 04 2017	DAS 26 9-89
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.13						JAN 09 2017	DAS 21 9-89
Quality Control									

DAS
21
9-89 JAN 04 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval 		
Description Work Order Deviation				Disposition					
32									
							Completed By 		
							Lead hand / Supervisor Approval Verification 		
							QC / QA Coordinator Approval 		

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

Picklist Print

Tuesday, December 13, 2016 8:03:22 AM

Page 1
/

Work Order ID: 154436

154436

Parent Item: D3552-11

D3552-11

Parent Item Name: Door Prop

Start Date: 12/13/2016

Required Date: 12/28/2016

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:B 09-04-20 rev.d as per dwg DD verified by:EC IPP Rev:C
as per dwg RevE DD 10.02.17 verified by:EC IPP Rev:D 10.12.03 as
per dwg rev.G DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

B8-240-575-150N

Purchased

No

110

Each

0.0000

1

8

B8-240-575-150N

GAS SPRING

8x SP/6-12-22

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

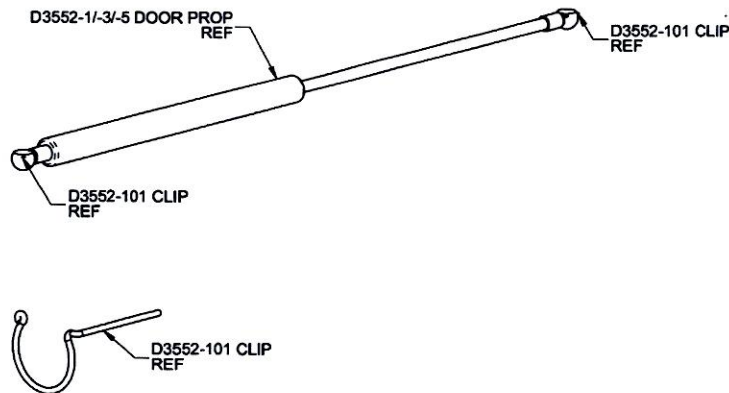
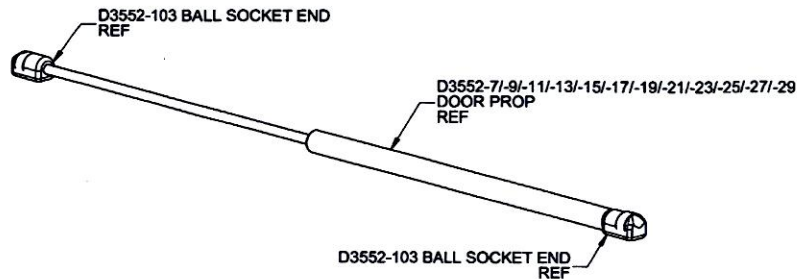


QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
		OTHER : ☐							

SPECIFICATION CONTROL DRAWING



DEC 13 2016

WLO: 154436

DAS
13
9-89

RELEASED
2015-08-04
ECN 15-609

L	ADD P/N D3552-29	VS	15.04.13
K	ADD "X" TO LS TECHNOLOGIES P/Ns TO DESIGNATE "EXTRA DAMPING" FOR D3552-15/-17/-19/-25/-27. REASON: PART 2-209.	MB	12.07.16
J	ADD P/N D3552-25/-27. REMOVE ALTERNATE PART NUMBER FOR -15, -17 AND -19. STROKE FOR -15, -17 AND -19 WAS 139/5.47 NOW 154/6.06. EXTENDED LENGTH FOR -15, -17 AND -19 WAS 386/15.2 NOW 387/15.2.	AP	11.12.07
I	ADD P/N D3552-23	RF	11.10.11
H	ADD P/N D3552-21	DC	11.03.10
G	FOR -15, FORCE-300/87.4 WAS 400/89.9, SUPPLIER P/N B8-154-387-300N WAS B8-154-387-400N; FOR -17, STROKE: 139/5.47 WAS 160/6.30, EXT LG: 386/15.2 WAS 407/16.0, SUPPLIER P/N B8-154-387-156N WAS B8-167-408-156N	JPH	10.11.01
F	ADD P/N D3552-15/-17/-19 AND ALTERNATE SUPPLIER	JPH	10.07.27
E	ADD P/N D3552-13 ZN B8-1, A8-1, D8-1, CHANGE NAME FROM "GAS SPRING" TO "DOOR PROP" THROUGH OUT DWG	HS	10.02.03
D	ADD P/N D3552-101 ZN D8-1, C7-1, C1-1 AND D3552-103 ZN D1-1 AND C2-1 AND ZN B8-1; ADD NOTE REGARDING D3552-101 AND D3552-103 COMPATIBILITY ZN A8-1	HS	09.04.02
C	ADD D3552-11 AND CONVERSIONS FOR INSPECTION; UPDATE P/N FOR D3552-7	LE	07.06.01
B	ADD D3552-7/-9; UPDATE DESC. D3552-1/-3/-5	LE	06.10.24
A	NEW ISSUE	LE	06.09.15
REV.	DESCRIPTION	BY	DATE
DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3552 REV. L SHEET 1 OF 2 TITLE DOOR PROP SCALE NTS	
DRAWN	VS		
CHECKED	AK		
MFG. APPR.	DD		
APPROVED	HS		
DE APPR.	DS	DOOR PROP SCALE NTS	
DATE	15.04.13		

APPROVED

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DART PART NUMBER	DESCRIPTION	STROKE (mm/in)	EXTENDED LENGTH (mm/in)	FORCE (N/lb)	END FITTING	MATERIAL	SUPPLIER	SUPPLIER PART NUMBER OR MODEL NUMBER
D3552-1	DOOR PROP	220/8.66	530/20.6	70/15.7	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-220-530-070N
D3552-3	DOOR PROP	200/7.87	490/19.3	200/45.0	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-200-490-200N
D3552-5	DOOR PROP	175/6.89	430/16.9	150/33.7	10mm SS BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	C8-175-430-150N
D3552-7	DOOR PROP	220/8.66	530/20.9	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-220-530-070N
D3552-9	DOOR PROP	200/7.87	490/19.3	200/45.0	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-200-490-200N
D3552-11	DOOR PROP	240/9.45	575/22.6	150/33.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-240-575-150N
D3552-13	DOOR PROP	220/8.66	530/20.9	140/31.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-220-530-140N
D3552-15	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	300/67.4	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-300NX
D3552-17	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	156/35.1	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-156NX
D3552-19	DOOR PROP W/EXTRA DAMPING	154/6.06	387/15.2	60/13.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-154-387-060NX
D3552-21	DOOR PROP	167/6.57	410/16.1	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-167-410-070N
D3552-23	DOOR PROP	190/7.48	475/18.7	70/15.7	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-190-475-070N
D3552-25	DOOR PROP W/EXTRA DAMPING	148/5.83	475/18.7	300/67.4	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-148-475-300NX
D3552-27	DOOR PROP W/EXTRA DAMPING	148/5.83	475/18.7	156/35.1	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B8-148-475-156NX
D3552-29	DOOR PROP	190/7.48	475/18.7	100/22.5	10mm NYLON BALL SOCKET	CARBON STEEL	LS TECHNOLOGIES	B6-190-475-100N
D3552-101	CLIP	N/A	N/A	N/A	N/A	CARBON STEEL	LS TECHNOLOGIES	C9
D3552-103	BALL SOCKET END	N/A	N/A	N/A	N/A	NYLON	LS TECHNOLOGIES	B10

1
2
3

D3552-X DOOR PROP

RELEASED
2015-08-04

APPROVED	DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	VS		
	CHECKED	AK	DRAWING NO.	REV. L
	MFG. APPR.	DD	D3552	SHEET 2 OF 2
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	DOOR PROP	NTS
DATE		15.04.13	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

- NOTES:
- 1) IDENTIFICATION: IDENTIFY PER QSI 044 6.2
 - 2) D3552-101 CLIP IS ONLY COMPATIBLE WITH D3552-1/-3/-5 DOOR PROPS
 - 3) D3552-103 BALL SOCKET END IS ONLY COMPATIBLE WITH D3552-7/-9/-11/-13/-15/-17/-19/-21/-23/-25/-27/-29 DOOR PROPS



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO34665**

Purchase Order Date 12/16/2016 11:05:05 AM
PO Print Date 12/16/2016

Page Number 1 of 1

Order From :
LS TECHNOLOGIES INC.
314 JESSOP AVE
SASKATOON, SK S7N 1Y6
CA

VC-LST0001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

DEC 16 2016

E-MAILED
E-MAILED

Contact Name
Vendor Phone 306 683 5000
Ship To Contact
Ship To Phone
Ship Via: FedEx Overnight collect
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB EXW - (Ex Works)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	B8-240-575-150N AS PER DWG D3552-11 REV. L B154436	GAS SPRING	12/22/2016 Yes 12/22/2016		8.00 Each	\$41.36	\$330.91
Line Total:							\$330.91
3	71401-45	PROCUREMENT QUALITY CLAUSES	12/22/2016 No 12/22/2016		1.00	\$0.00	\$0.00
Line Total:							\$0.00
PO Total:							\$330.91

PO Instructions: Fedex Acc#151793240

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 12/16/2016

LS Technologies Inc
314 Jessop Ave
Saskatoon, SK S7N 1Y6

Ph: 306-683-5000 Fax: 306-683-6403

Packing Slip

P.O. No.	Date	Invoice #
34665	12/16/2016	15812

Bill to:

Dart Aerospace Ltd
1270 Aberdeen St.
Hawkesbury, ON K6A 1K7

Ship to:

Main Finished Goods Location
Dart Aerospace Ltd
1270 Aberdeen St.
Hawkesbury, ON K6A 1K7

Ship	Via	FOB
12/16/2016	Fed-Ex	

Qty	Description
8	D3552-11 B154436 Gas spring
	Shipping Via FED EX Tracking # 778002057498
	SP/6-12-22

Order checked by



LS Technologies Inc

314 Jessop Ave

Saskatoon, SK, S7N 1Y6

Ph: (306) 683-5000 Fax: (306) 683-6403

Certificate of Compliance

Dec 16, 2016

This is to certify that the parts listed below meets specifications as required by your order.

8 Units: D3552-11 B154436 Gas Spring

Country of Manufacture: Canada

Date of Manufacture : Dec 2016

This product is ROHS compliant.

Purchase Order # 34665

Invoice # 15812

L S Technologies Inc Canada

A handwritten signature in blue ink, appearing to be 'Nolan Fehr', is written over a horizontal line.

Nolan Fehr
Manager